



FAO-EBRD project: Upgrade of Meat Quality Standards in Montenegro and Exchange of Lessons Learned in the Western Balkans

### Inventory of traditional products from Montenegro

Potential products for quality labelling as geographical indications and traditional specialties guarantees

Working document - April 2017









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#### **Acronyms**

Art. Article

BiH Bosnia and Herzegovina

CG Montenegro

CoP Code of Practice

EBRD European Bank for Reconstruction and Development

e.g. Example given

FAO Food and Agriculture Organization of the United Nations

GI Geographical Indication

Km kilometre

MARD Ministry of Agriculture and Rural Development

n.a. Non available

NCG Northern Montenegro

PDO Protected Denomination of Origin

PGI Protected Geographical Indication

QOW Quality & Origin Webtool

REDD Réseau Echange Développement Durable.

TSG Traditional Specialities Guaranteed

USD US American dollar

#### Acknowledgements

This inventory has been developed in the frame of the FAO-EBRD project: "Upgrade of Meat Quality Standards in Montenegro and Exchange of Lessons Learned in the Western Balkans" that aims to support the development of sustainable value chains through the development of geographical indication in the meat sector.

This project is being implemented in collaboration with the Ministry of Agriculture and Rural Development (MARD), with the operational support from the University of Donja Gorica and the Swiss NGO REDD. In particular we thank Danijela Stolica, Director of MARD, Merisa Cekic, and Head of Quality Scheme of MARD for their support. Professor Aleksandra Martinovic from the University of Donja Gorica and her students for the data collection and analysis of the potentialities, and Pascal Bernardoni from REDD for supervising the inventory process and analysis. Lisa Paglietti, and Emilie Vandecandelaere, FAO Investment Centre Division, ensured technical supervision and fine-tuning of the study and Stefania Manzo, FAO project officer, contributed to the editing and layout of the document.

#### Background

#### Importance of differentiation and labelling strategies in Montenegro

Agriculture is one of the most important sectors in Montenegro, both in economic and social terms. It contributes to about 10% of the national gross domestic product and employs roughly 6% of the active labour force. Notwithstanding the sector's important role in the economy, Montenegro depends highly on imports in the food sector. The livestock and meat sector is the most important food chain in Montenegro, representing approximately 45% of the total agricultural production. Montenegro does not fully use its production potential in the livestock sector as domestic production currently fulfils only 40% of the total meat consumption in the country. For Montenegrin meat producers, compliance with higher safety and quality standards is increasingly important if they are to remain competitive, to widen export market opportunities and increase economic returns in the sector.

As a result of the country size and consequently the size of its agriculture and subsectors, and its hilly and mountainous terrain, particularly in the view of the EU access, quality differentiation is key to be competitive, by providing and promoting specific quality products, in particular origin-linked products, that benefit from Montenegro specific natural resources.

The specific quality of Montenegrin products, in terms of characteristics such as origin-linked quality, organic, and taste, could serve as a basis for product differentiation on the local and on export markets. The food sector needs to identify its potential and discuss ways to promote their products with public authorities.

Developing a national strategy for upgrading and promoting food safety and quality in the Montenegrin meat sector requires close collaboration between the public and private sector actors. The FAO/EBRD project "Upgrade of Meat Quality Standards in Montenegro and Exchange of Lessons Learned in the Western Balkans" aims to provide a platform for greater public-private dialogue.

In that context, the Ministry of Agriculture and Rural Development (MARD) is supporting the adoption of different quality standards, denomination of origin, geographical indications and

<sup>&</sup>lt;sup>1</sup> World Bank Data: <a href="http://data.worldbank.org/indicator/NV.AGR.TOTL.ZS">http://data.worldbank.org/indicator/SL.AGR.EMPL.ZS</a>

traditional specialties that will help quality-oriented producers to differentiate and protect their food products on the markets.

In the Montenegrin Law<sup>2</sup>, these voluntary standards are defined as follow<sup>3</sup>:

- 1) Denomination of origin means the name of a region, a specific place or, in exceptional cases, a country, used to describe an agricultural or food product:
  - originating in that region, specific place or country;
  - the quality or characteristics of which are exclusively or essentially due to natural and human factors inherent to a particular geographical environment, and
  - the production, processing, and the preparation of which take place in a defined geographical area.
- 2) Geographical indication (GI) means the name of a region, a specific place or, in exceptional cases, a country used to describe an agricultural or food product:
  - originating in that region, specific place or country;
  - which has a specific quality, reputation or other characteristics attributable to that geographical origin; and
  - the production and/or processing and/or preparation of which take place in a defined geographical area.

Note: As in many countries, geographical or non-geographical traditional names used to designate an agricultural or food product fulfilling the conditions referred to in Article 3 paragraphs 1 and 2 of this Law shall be considered as designation of origin or geographical indication.

- 3) The Traditional speciality guaranteed (TSG) are defined as follow:
  - "Traditional speciality guaranteed" means an agricultural or food product recognized for its specific characters through a process of registration, in accordance with this Law.
  - Traditional, in terms of this Law, means proven usage of the product on the market for a period of time showing transmission from a generation to generation of at least 25 years.
  - Specific characters, in terms of this Law, means the characteristic or a set of characteristics
    clearly distinguishing one agricultural or food product from other similar agricultural or
    food products of the same category, which may relate to the specific characteristics of the
    product such as physical, chemical, microbiological or organoleptic characteristics of the

<sup>3</sup> Law on designations of origin, geographical indications and indications of traditional specialties guaranteed for agricultural and food products.

<sup>&</sup>lt;sup>2</sup> Law on Designations of Origin, Geographical Indications and Designations of Guaranteed Traditional Specialty Agricultural Products and Foodstuffs (Official Gazette of Montenegro, No. 18/11).

product or a method of production that the producer applies or the specific conditions during the production process."

#### Montenegro: a small country with great human and natural diversity

Montenegro, a country of 13,812 km<sup>2</sup> with slightly more than 600,000 people, offers a wide and diverse range of products considering its size.

Inhabited since the 6<sup>th</sup> Century by Slavic population, Montenegrin territories have been occupied simultaneously or consequently by Ottomans, Venetians, Austro-Hungarians, French and Serbs, until very recently. Modern Montenegro gained progressively territories during the 19<sup>th</sup> Century. The expansion started from Cetinje, the Sothern city and Old Royal Capital of the country, towards the northern regions with the recovery of Sandžak only at the beginning of the 20<sup>th</sup> Century. The Bay of Kotor that had been for over five centuries under Venetians rulers who imported their culture and language, and later on under the Austro-Hungarian Empire, became Montenegrin only after the WWII, after belonging to Croatia for some decades. This complicated but rich history made of exchanges and of different cultures and populations influences partly explains the food diversity that the country holds.

#### Coastline, Island Gospa



@Bernardoni, 2005

Climate is the other important factor creating the conditions for a wide range of farm production patterns. On the basis of W. Koppen climatic regions classification, Dubljevic identified in

Montenegro 7 climatic zones that shift from Mediterranean to humid boreal climate.4 Interactions between people and nature are still very strong as 36.8 percent of the population lives in rural areas (Monstat, Census 2011).



Mountains at the border with Serbia, Bukovica

@Bernardoni, 2015



Polje and karstic environment at nearby the border with Bosnia and Herzegovina, Dragalj,

@Bernardoni, 2011

#### Montenegrin and Balkan specificities regarding geographical indications

#### The importance of traditional food production

In Montenegro, as in the rest of Balkan countries, farm based traditional production is still very active due to a very high percentage of rural households. Most of farming households still produce their own food, transforming milk into cheese, butter, kajmak and other dairy products,

<sup>&</sup>lt;sup>4</sup>R. Dubljevic, (2009), Country Pasture/Forage Resource Profiles, FAO.

processing meat of different animals in hams, salami and other specialties as well as fruit and vegetables in pickles and sweet preserves for the wintertime.

Recent rural exodus and migration to Western Europe create strong rural – urban family linkages favouring a direct flow of products in the grey market. In parallel, urban consumers who are much attached to their "national" specialties are increasingly searching for "real" products, either because, they lost or are losing their ties with their rural origins or by convenience.

#### **Usage of appellations**

The survey that has been conducted for the inventory has shown that experts, producers and/or consumers have different opinion and versions of the names, the nature of the products and/or their area of production. On one hand, appellations for the same product might differ from region to region or from one person to another. On another hand, the same appellation might designate different products.

This can be clearly demonstrated by the case of the Montenegrin and neighbouring countries culinary heritage corn stones: Kačamak and Civcara. While some people claim that the former must be made with maize and the latter with wheat, others claim the opposite, while a third group is of the opinion that these products can be made of both maize and wheat. The recipe of Montenegrin Kačamak available on the web even integrates potato combined with wheat flour in the recipe. Similar confusions exist for meat and dairy products, as well as for some traditional pastries.

#### Balkan food heritage common to the countries of the region

It is often difficult and questionable to attribute a product to one region or a country, as to a large extent Balkan countries share the same cultural heritage, including food heritage. For centuries up until recently, recipes and processing techniques have migrated at the discretion of population groups' displacements. Balkan demography shows a very dynamic pattern influenced by wars, eased by the presence of a *lingua franca* and by the two empires that together covered most of the Balkans for 5 centuries, which inevitably favoured population mixing. Consequently, many products are produced in different regions within the same country or in different countries following very similar production processes and bearing sometimes the same name: Sveži sir (fresh white cheese), ajvar, sudžuk, kajmak, čvarci (greaves), etc.

#### **Cross-border Geographical Indications**

Conversely, there are products that originate from delimited areas of production without bearing the name of those areas. As previously mentioned, and according to the current Montenegrin and European laws, these are eligible products for GI protection. The fact that their area of production

is located between two or more countries may cause some difficulties in the registration. This is the case for two processed meat products: Stelja (dried sheep meat) and Goveđa (dried beef meat) pršuta (the 2 pilot products of the project), but also for Sudzuk (sausage), and certain dairy products or buckwheat. Many of these products are produced in what was previously called Sandzak of Novi Pazar and later Sandžak (see map below). The current approach adopted in the single countries is to protect these products at national level by adding a geographical locator. Govedja pršuta is protected in Serbia as Užička Pršuta (dried beef meat from Užice) or Sjenička Sužuk (Sudžuk from Sjenica).

Based on the Montenegrin legislation, the 2 products could be protected, but without geographical locator. However, to avoid problems with Serbia, the product may have to be registered with the country name as an additional locator (e.g., Montenegrin Stelja and Montenegrin Goveđa pršuta), unless a cross-border registration is being considered.

Several other cross-border GIs, with or without geographic names, exist in all the former Yugoslavia. The 2 main reasons are:

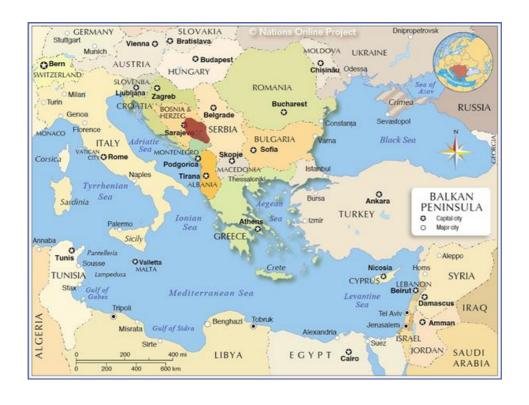
- a common history;
- farming communities belonging to the same population groups on both sides of newly established countries borders;

There are some other products that are traditional but cannot be claimed by one sole country namely:

- Šarski Sir (cheese from Shar mountain) between Kosovo and Macedonia
- Kastradina (dried goat and sheep meat) prepared in Montenegro and Croatia
- Sudžuk (sausage), Serbia, Montenegro and Bosnia
- Pindjur and Ajvar prepared in south Serbia, Macedonia and Kosovo.
- Istria raw ham (Istarski Pršuta) in Slovenian and Croatia.

To these could be added a certain number of fresh lamb and sheep meat.

Figure 1: Cross border area between Montenegro, Serbia, Bosnia and Herzegovina and Kosovo



#### **Objectives and methodology**

The objective of the inventory is to identify Montenegrin food products that qualify for qualifying Designations of Origin, Geographical Indications and Designations of Guaranteed Traditional Specialty Agricultural Products and Foodstuffs (as defined under the Montenegrin law (Official Gazette of Montenegro, No. 18/11), and therefore fulfil the following criteria:

- Traditional products that have specific characteristic because of the local natural conditions or the producers' know-how inherited through several generations
- Products with reputation recognised by consumers from or out of the area of production, OR
- Products traditionally consumed as such, in form of ingredient or as a dish, typical product for the Montenegrin cuisine

The goal is to identify potentialities for labelling or promotion quality strategies and allow for better supporting products with higher potential through projects and state instruments.

A comprehensive and well-documented inventory is likely to raise awareness among producers and consumers about the existing value of these products and in general about food diversity and richness in Montenegro. This inventory will provide guidance in the selection of pilot products for the development and registration of GIs in Montenegro, in particular a meat product under the FAO-EBR Project.

The collection and analysis of data are based on the FAO methodology and the related questionnaires (see Quality&Origin Webtool (QOW) http://www.fao.org/food-quality-origin/webtool/en/). A specific questionnaire for the Montenegro inventory has been elaborated with additional questions related to TSG.

The inventory followed a 3-step approach:

- 1. The definition of the objectives and the frame of the inventory
- 2. The systematic identification of traditional products with specific quality
- 3. The identification of products with a potential for GI or TSG registration

See annex for detailed description of the methodology and questionnaires.

# <u>Inventory of traditional products from Montenegro with a potential for labelling as geographical indication or traditional specialities</u>

Among a list of more than 100 traditional food products initially identified through interviews in different regions of Montenegro, 22 products have finally demonstrated a high potential for being registered as recognized and protected in Montenegro, as follow:

- 15 potential products for Protected designations of origin or protected geographical indications:
  - o 9 meat products:
    - DRIED BEEF MEAT
    - SHEEP STELIA
    - NJEGUŠKI HAM
    - NJEGUSKA SAUSAGE
    - KASTRADINA
    - MUSNICE
    - ZATOP
    - FRESH SHEEP and LAMB MEAT
    - SUDŽUK
  - 5 cheeses and dairy products:
    - CHEESE PRLJO
    - KOLASINSKI CHEESE
    - SKORUP
    - PLJEVLJA CHEESE
    - NJEGUSKI CHEESE
  - o 1 cereal GI product:
    - HLEDA BRAŠNO
- 12 potential products for traditional specialities guaranteed
  - KAČAMAK
  - RASTAN
  - CICVARA
  - PRIGANICE
  - LAMB IN MILK
  - LAMB UNDER SAC

- TARANA
- GURABIJA
- HACALIJA
- DRIED CARP
- DRIED BLEAK
- EEL WITH RICE

Figure 2: Montenegro Products map [to be completed].



Source: author's compilation.

#### **Meat Products**

#### 1. DRIED BEEF MEAT



@ Jasmin Vreva, Bijleo Polje, 2016

Name of product

GOVEĐA PRŠUTA

**Product type** 

Processed meat product

Area of production

North Montenegro

Number of producers (est.)

5000 farmers

Volumes (est.)

2000 tonnes

Value of production (est.)

EUR 24 Million

When describing the economy of the second half of the 19th century, Pavle Rovinski mentions that dried meat was used for household consumption but also for sale with the aim of buying of new cattle (P.A. Rovinski, Crna Gora u prošlosti i sadašnjosti (1851-1907), Tom II, str. 424-461). Other references mention the important commercial linkages between the northern areas of Montenegro and Dubrovnik, Sofia and Istanbul, suggesting that dried beef meat was traded on these markets. (Petar Šerović, "O jednom

### Social and historical facts

starom opisu puta od Venecije do Carigrada s osobitim obzirom na Crnogorsko primorje, Godišnjak Pomorskog muzeja Kotor", Kotor 1963, 247). Nowadays, govedja pršuta is widely consumed in many ex-Yugoslavia countries as a starter, often as part of "meze" (traditional appetizer part of the traditional Balkan meals).

## Description of the product

The final product has a moderately intense aroma of beech or hornbeam wood. The product is moderately aromatic, slightly salty, with mild acidity and without bitterness. The final product has a moderate to firm consistency, with recognizable softness, without plasticity, suitable for chewing and with emphasized softness in the mouth.

# Human and natural factors

The area of production is characterized by a continental climate and in some areas by mountain climate. The area has harsh and snowy winters and warm and mild summers. Dry and cold winters allow for drying beef meat and obtaining the desired quality of dried beef meat. Pastures in the area are composed primarily of grass of the good nutritional composition (harrier, different types of ryegrass and clover) and with recorded presence of medicinal and aromatic plants. A long tradition of production of the Montenegrin dried beef meat is the result of the transfer of knowledge and skills through the generations. People from this area have perfected the practical knowledge and skills, which resulted in the creation of the balanced taste, especially when it comes to the process of smoking and drying/ripening. The current husbandry techniques including semi-extensive farming of cattle and the utilization of primarily natural pastures greatly impacts the meat quality for producing Montenegrin beef ham.

(aged between 3 and 7 years); the parts of the carcass used are: : legs (without shank), back (from the caudal edge of the fourth thoracic vertebra to the hip- tuber coax), steak and shoulder. Traditionally, production takes place during winter-time, from November to February. Semi-industrial production is extended to a longer period thanks to cold storage facilities allowing for the largest processor the processing throughout the whole year. The shaped meat cuts are salted through manual rubbing with sea salt (about 4-6 percent per piece weight) for 5-10 days with occasional turning. The smoking is performed using beech and hornbeam wood and lasts 3-4 weeks. The period of ripening/

maturation lasts approximately 2 months.

As a raw material for the production of beef ham, muscles are the best part of the cattle

# Production process

#### 2. SHEEP STELJA



@ Jasmin Vreva, Bijleo Polje, 2016

Name of product

OVČIJA STELJA

**Product type** 

Processed meat

Area of production

North Montenegro

Number of producers (est.)

500

Volumes (est.)

1000 tonnes

Value of production (est.)

EUR 5 million

### Social and historical facts

The first written records on sheep breeding in this area date back to 1435 stating that almost all households raised cattle during the summer months (Spasojevic, V. M. (2007). Crnogorski katuni. Dnevni list pobjeda, 7. April- 31. July 2007). Pavle Rovinski, in his writings, in order to show the condition of economic activity of the nation, states that in 1880 in Montenegro there were about 530 000 heads of sheep and goats, of which the largest number was in the north of Montenegro (P.A. Rovinski, Crna Gora u prošlosti i sadašnjosti (1851-1907), Tom II, str. 424-461). Since the first days of the Ottoman rule

Pljevlja, Budimlje, Bihor and Bijelo Polje were trading settlements in northern Montenegro. The road over Pljevlja led the way from Dubrovnik to Sofia and continued to Istanbul. Dubrovnik was the place where Montenegrins took goods on credit until 1526 (Milisav Lutovac, Bihor i Korita, 46-48. Petar Šerović, O jednom starom opisu puta od Venecije do Carigrada s osobitim obzirom na Crnogorsko primorje, Godišnjak Pomorskog muzeja Kotor, Kotor 1963, 247). The allegations indicate that Dubrovnik, among other cities, was the place for exporting livestock, dried beef and sheep meat (Petar Šerović, O jednom starom opisu puta od Venecije do Carigrada s osobitim obzirom na Crnogorsko primorje, Godišnjak Pomorskog muzeja Kotor, Kotor 1963, 247). Livestock has been and remains the most important economic sector. Rožaje, Plav and Gusinje were known for numerous herds of sheep and cattle. Pavle Rovinski also describes the first primitive slaughterhouses- where the slaughtering of cattle was carried out, as well as customs where dried meat was used to feed households but also for sale with the aim of buying of new cattle (P.A. Rovinski, Crna Gora u prošlosti i sadašnjosti (1851-1907), Tom II, str. 362-376).

When writing about dried sheep meat, Rovinski also states that the most usual one was kastradina, and explains that the whole sheep carcass was firstly salted and then smoked and firewood dried (P.A. Rovinski, Crna Gora u prošlosti i sadašnjosti (1851-1907), Tom II, str. 424-461). By further development of the economic activities, there was an organized production and processing of beef and more accurate register of the number of livestock in the region.

Description of the product

Halves of Montenegrin Stelja includes neck, back, loin, leg with shank, ribs, breast with ribs, belly and tail. At the cross section, neck meat is marbled by the intramuscular fatty tissue (tallow). Fat thickness is between 3 mm and 10 mm. Fat thickness increases from the first to the last rib. Breast meat includes the outer to the inner side layers of the tallow. The tallow of the breast must have visible granulation. The tallow layer at the belly must be fatter than the meat layer. At the surface, the product is a light brown to yellowish colour (similar to the colour of roasted lamb) without the presence of soot and resin. The outer side of Montenegrin Stelja, in the area of the neck, ribs and leg is brownish and in the rib area and belly is of a light brown colour. Inner part of Stelja is mostly brownish with black notes.

The taste of the product is slightly moderately salty with also some sweet taste; it shows a slightly more intense taste than the tallow but without rancidity.

Montenegrin Stelja is produced in a distinct geographical area which is characterized by specific climatic and natural conditions favourable to the development of desirable characteristics in the finished product. The natural conditions in the area of production, with semi-extensive cattle farming, including use of primarily natural pastures, greatly influence the quality of the meat for the production of Montenegrin Stelja. Pastures are at an altitude between 1000 to 1200m, characterized by fertile land and low erosion and

#### **Human** and natural factors

**Production** process

with favourable floristic composition. Pastures are mainly composed by grasses with good nutritional composition (harrier, different types of ryegrass and clover) and with recorded presence of medicinal and aromatic plants. A long tradition of production of Montenegrin Stelja is the result of the transfer of knowledge and skills through generations. People from this area have perfected the practical knowledge and skills, with the creation of the balanced taste, especially when it comes to the process of smoking and drying/ripening. This area has over 10 registered producers of Stelja. The influence of natural and climatic conditions, combined with the knowledge and experience that the accumulated in the people living in this area, contribute to the distinctive characteristics of the product, guaranteeing its quality and recognition. It is produced with sheep meat, salted and smoked on beech or hornbeam wood, dried

with fresh mountain air. In producing Stelja, an entire sheep carcass is used (except the internal part of the leg- hind shank), without heads and inners. Carcasses with accompanying fat tissue and connective tissue are used, without bones with the exception of parts of the distal knee bones and shank in the length of up to 5 cm. For the production of Stelja, fattened male castrates and barren sheep are used. Salting is performed by manually rubbing sea salt for 10 days, without exceeding 4% of salt content in the final product. The process of drying and smoking takes 3-4 weeks with re-composition of the sticks with the products. The period of ripening/maturation lasts for about two months.

#### 3. NJEGUŠKI HAM



@ Marko Radonjic, 2016

Name of product

NJEGUŠKA PRŠUTA

**Product type** 

Processed meat

Area of production

Njeguši municipality

Number of producers (est.)

40

Volumes (est.)

5000 tonnes

Value of production (est.)

EUR 60 million

The production of Njeguški ham dates back to the 15th century. It can be however more reliably traced from the 19th century through numerous archive documents, researcher records and visitors that passed through Montenegro. One of the oldest records dates back to 1838 when the Saxon king Friedrich August II was in Cetinje, and the reporter describes the local market and Njeguški ham. German writer Heinrich Stieglitz describes his visit to Njeguši in 1841 during which he was offered Njeguški ham. Numerous documents describing Montenegro also mention trading of Njeguši ham with the markets of Kotor, Dubrovnik, Venice, Malta and Bordeaux in XIX and XX century. After 1970, the creation of state-owned processing facilities namely "Agrokombinat 13 jul" and "Niksentrade", in addition to the private ones influenced the increase in Njeguši ham

### Social and historical facts

production. Njegusi ham is one of the characteristic products associated with the national gastronomy of Montenegro, and over the last 10 years the festival "Njeguši table" is organized, visited by over than thousand tourists and guests. During the touristic season more than 50 000 tourists, individually or in group visit the national restaurants in Njeguši where they are offered Njeguški ham. In the last decades, the product has been shown on different food fairs in Podgorica, Budva, Novi Sad, Sarajevo, Athens, Moscow and Frankfurt and has been awarded with numerous prizes and medals.

## Description of the product

The combination of the Mediterranean and continental climate influences the process of drying ham and its specific characteristics. Salting with sea salt, smoking and curing in the traditional way using beech wood and maturation of products up to 12 months gives the product its unique features.

### Human and natural factors

The suitability of the altitude (ranging from 800 to 1200 m), the location of the facilities producing Njeguši ham, located where the air flow is the most intense, beech wood used for smoking of the products, and air temperature in the range from -10° to 20°C, highly influence the unique quality of the Njeguši ham. Inhabitants of Njeguši village have retained the way of processing and drying of ham for centuries. During the last five decades, the number of producers and production levels increased significantly, fulfilling market needs, but at the same time retaining the traditional way of production. The Association of producers of Njeguški specialities has existed for more than 15 years. Furthermore, in 2003, Njeguški ham obtained the Product Denomination of Origin certificate during the Serbia and Montenegro Federation.

# Production process

It is made of pork ham. The ham is processed in a specific way. Pork legs weighting approximately 12 kg are salted with a maximum of 4 percent of sea salt for 14 days, pressed for additional 15 days, smoked for 5 to 10 weeks and then matured for 3 to 6 months.

#### 4. NJEGUSKA SAUSAGE



@ Marko Radonjic, Njegusi, 2016

Name of product

NJEGUŠKA KOBASICA

**Product type** 

Processed meat

Area of production

Central Montenegro

Number of producers (est.)

70 farmers

Volumes (est.)

1000 tonnes

Value of production (est.)

EUR 7 million

#### Social and historical facts

Production of the Njeguši sausage is as old as the production of the Njeguši ham and dates back to the 15<sup>th</sup> century. The native people have been using pork legs for the production of ham, while the other parts of the animal, that could not be preserved through drying or smoking in big pieces, are cut into smaller ones, mixed with the fat tissue and then dried and smoked. In many records where Njeguši ham is described, the Njeguši sausage is also mentioned. It can be more reliably traced back to the XIX century, through numerous archive documents, researcher records and voyagers that passed through Montenegro. One of the oldest records dates back to 1838 when the Saxon king Friedrich August II was in Cetinje, and the reporter describes the local market and meat products. During the period after 1970,

the presence of state-owned processing facilities, such as "Agrokombinat 13 jul" and "Niksentrade", in addition to the private ones have influenced a significant increase in the production of Njeguši sausage. In the national gastronomy of Montenegro, aside from Njeguši ham, Njeguši sausage is also a well-known product that is used in the preparation of numerous national dishes. During the touristic season more than 50 000 tourists visit the national restaurants in Njeguši where they are offered with Njeguši ham and Njeguši sausage. The Association of the producers of Njeguški specialities has existed for more than 15 years.

# Description of the product

The product has a specific aroma originating from the smoking e, and the spices. The good balance of the natural conditions in the production process and the right proportion of the ingredients contribute to the specific quality of the product.

### Human and natural factors

The suitability of the altitude (ranging from 800 to 1200 m), the location of the Njeguši sausage production facilities producing Njeguši sausage, located where the air flow is the most intense, the beech wood used for the smoking process of the products, and the air temperature ranging from -10° to 20°C are all factors that all highly influence the unique quality of Njeguši sausage. Inhabitants of Njeguši village have retained a particular method of processing and drying of sausage for centuries. During the last five decades, the number of producers has increased significantly, fulfilling market demand, but at the same time retaining the traditional way of production.

# Production process

Pork meat and fat tissue are mixed in the ratio of 2:1, 2 percent of salt is added, black pepper and garlic with red pepper. The meat and fat tissue are cut into small - 1x1 cm- pieces of 1x1 cm and grinned. The mixture is filled into the pork intestines. Smoking is done with beech wood for 2-3 hours. The product is then matured in a cool and dark place for 25 days.

# **5. KASTRADINA** Dried goat and sheep meat



Photo by: Jasmin Vreva, Niksic, 2016

Name of product KASTRADINA

Product type Processed meat

**Area of production** | Central Montenegro

Number of producers (est.) 30 farmers

**Volumes (est.)** 70 tonnes

Value of production (est.) EUR 700 000

Social and historical facts

Traditionally, it is produced in the central and coastal part of Montenegro, as well as in south

Dalmatia. The name comes from the Latin word "castrare," meaning castration. Its production dates back to the 15th century, when the local people used it in trading with Venice and other trade centres of that time.

# Description of the product

Dried and smoked sheep or goat leg. The pieces weight from 4 to 6 kg, and must be of light brown colour. The inner part of Kastradina is mostly brownish with black notes.

### Human and natural factors

A long tradition of production of Montenegrin dried meat is the result of the transfer of knowledge and skills through the generations. People from this area have perfected the practical knowledge and skills, especially the smoking and drying/ripening process, creating a product with a balanced taste. The sheep breeds used to produce Kastradina are indigenous of the area of production (e.g. Ljaba, Pramenka, Zuja, and Bardoka). This area is characterized by climate diversity influenced by continental climate, in some areas by mountain climate, with the Mediterranean influence.

#### **Production process**

Kastradina is produced from indigenous breeds fed with fodder from natural pastures and meadows. Only sheep and goat legs are used to produce Kastradina. The legs are salted with sea salt before being smoked on beech wood and dried in mountain air. The forelegs are slated for 7 days, pressed for 3 to 4 days, then washed and drained in air for 48 hours, followed by smoking for 10 days. The maturing process lasts up to 2 months.

#### 6. MUSNICE

Name of product

MUŠNICE

**Product type** 

Processed meat

Area of production

Central Montenegro; Coastal area

Number of producers (est.)

200 farmers

Volumes (est.)

2 tonnes

Value of production (est.)

EUR 10 000

Social and historical facts

This sub-product was typically made by ham producers. Its production is thus related to those areas where pork ham and pork sausage are traditionally produced and where corn is mostly grown. People usually raised one to two pigs using pigs' colon to produce this type of sausage.

Description of the product

 $Slightly \ smoked, consumed \ cooked, with \ intense \ flavour \ of \ corn \ flour \ mixed \ with \ fat \ tissue.$ 

Human and natural factors

People try to use as much of the animal by-products as possible. The animals are fed conventionally, but semi-extensively, using also naturally grown plants in their diet. The corn is grown without chemicals, generally on small areas highly influenced by climate and soil composition.

**Production process** 

Pork colon is stuffed with salted corn and wheat flour, as well as with fat tissue. It is cooked in boiling water and then dried for up to 15 days.

#### 7. ZATOP



@ Jasmin Ajanovic, Plijevlja, 2016

Name of product ZATOP

**Product type** P

Processed meat

Area of production

Northern Montenegro

Number of producers (est.)

300 farmers

Volumes (est.)

0.5 tonnes

Value of production (est.)

EUR 3 000

Social and historical facts

Northern Montenegro holds a long tradition of cattle breeding. In late-autumn and early-winter, meat is dried and conserved, while the interiors are used for the preparation of Zatop. This tradition is as old as the one of making beef dried meat and Sudžuk.

**Description of the product** 

The product has an intense taste, with a smoky aroma and can be consumed in small quantities cold or heated. It has a semi-hard consistency and can be consumed as a spread on bread.

### Human and natural factors

The area of production is characterized by climate diversity and is influenced by continental and in some areas by mountain climate. The basic climate features of this area are harsh and snowy winters and warm and mild summers. The dry and cold winters allow for drying beef meat and obtaining the desired quality of dried beef meat. Pastures in this area are mainly composed by grasses with good nutritional composition (harrier, different types of ryegrass and clover) and by medicinal and aromatic plants. A long tradition of production of the Montenegrin beef is the result of the transfer of knowledge and skills through the generations. People from this area have perfected the necessary practical knowledge and skills, which has resulted in the creation of a balanced taste, especially when it comes to the process of smoking. The current husbandry techniques including semi-extensive cattle farming and the utilization of natural pastures greatly impacts the quality of the ingredients for the production of Montenegrin Zatop.

# Production process

The product is traditionally produced in Northern Montenegro. It is made of inner organs of beef, such are liver, intestines, etc. The mixture is cooked, finely shred, dipped in fat with the addition of salt and spices. After cooking, the mixture is poured into moulds until solidification and smoked for about 20 days.

#### 8. FRESH SHEEP and LAMB MEAT

Name of product

SVJEŽE JAGNJEĆE I OVČIJE MESO

**Product type** 

Fresh meat

Area of production

Northern Montenegro and Tuzi region

Number of producers (est.)

3200 farmers

Volumes (est.)

3000 tonnes

Value of production (est.)

EUR 30 million

Social and historical facts

almost all the households raised cattle during the summer months to katuni (Spasojevic, V. M. (2007). Crnogorski katuni. Dnevni list pobjeda, 7. April- 31. Jul 2007). Pavle Rovinski, in his writings, in order to show the level of economic activity of the nation, states that in 1880 in Montenegro there were about 530,000 heads of sheep and goats, of which the largest number was in the north of Montenegro (P.A. Rovinski, Crna Gora u prošlosti i sadašnjosti (1851-1907), Tom II, str. 424-461). Since the first days of the Ottoman rule Pljevlja, Budimlje, Bihor and Bijelo Polje were trading settlements in northern Montenegro. The road over Pljevlja led the way from Dubrovnik to Sofia and continued to Istanbul. Dubrovnik was the place where Montenegrins were taking goods on credit until 1526 (Milisav Lutovac, Bihor i Korita, 46-48. Petar Šerović, O jednom starom opisu puta od Venecije do Carigrada s osobitim obzirom na Crnogorsko primorje, Godišnjak Pomorskog muzeja Kotor, Kotor 1963, 247). The allegations indicate that Dubrovnik, among other cities, was the place for exporting livestock, dried beef and sheep meat (Petar Šerović, O jednom starom opisu puta od Venecije do Carigrada s osobitim obzirom na Crnogorsko primorje, Godišnjak Pomorskog muzeja Kotor, Kotor 1963, 247). Livestock has been and remains the most important economic sector. Rožaje, Plav and Gusinje were known for numerous herds of sheep and cattle. Pavle Rovinski also describes the first primitive slaughterhouses where slaughtering of cattle was carried out, as well as customs where dried meat was used to feed the household but also for sale with the aim of buying of new cattle (P.A. Rovinski, Crna Gora u prošlosti i sadašnjosti (1851-1907), Tom II, str. 362-376). When writing about dried sheep meat, Rovinski also states that the most usual one

The first written records on sheep breeding in this area date back to 1435, stating that

was "Kastradina" and explains that the whole sheep carcass was first salted and then smoked and firewood dried (P.A. Rovinski, Crna Gora u prošlosti i sadašnjosti (1851-1907), Tom II, str. 424-461). With further economic development, a more organized production and beef processing was developed, along with a more accurate record keeping of the number of livestock in the region.

# Description of the product

The meat used is of young animals, resulting in a low percentage of fat tissue. When prepared, the meat results soft and without a strong aroma of sheep fat tissue.

### Human and natural factors

The low and medium mountain pastures and meadows with high biodiversity confer a specific taste to the meat of animals reared in this environment. The use of the sijenička pramenka breed is another factor that influences the characteristics of the meat.

# Production process

The product is derived from animals mainly fed with grass-based fodder produced from low and medium mountain pastures and meadows. The best quality lamb meat is obtained from animals that are 3-5 months old. Sheep are usually slaughtered in October when they are 1 year old or older, though, the best quality is obtained with 1-year old animals.

**9. SUDŽUK**Beef meat sausage



@ Jasmin Vreva, Bijleo Polje, 2016

Name of product

SUDŽUK

**Product type** 

Processed meat

Area of production

Northern Montenegro, South west. Serbia and Bosnia

Number of producers (est.)

1000 farmers

Volumes (est.)

10 000 tonnes

Value of production (est.)

EUR 5 million

### Social and historical facts

Sudžuk is a dry, spicy sausage which is consumed from the Balkans to the Middle East and Central Asia. The area coincides with the area of the Ottoman Empire. This suggests that the Ottomans have spread the name that designate sausages having in common the use of spices (fenugreek, cumin, sumac, garlic, salt, and red pepper) and high salt content, but that can be very different in shape and in meat content. In fact, Sudžuk is usually produced with beef meat, but it can also be made of sheep, pork and horse meat as in the case of Central Asia. In the Balkans, Sudžuk is mostly produced and consumed among the Muslim population. It is consumed raw, often as a starter (meze) or as a snack.

# Description of the product

The product has the shape of a horseshoe and has a light smoking aroma. The scent of garlic enhances the specific taste of the product. The texture of the product is soft and the colour is red to dark red. Quite high content of fat and salt with slight acidity aroma.

# Human and natural factors

The beef meat used for the confection of sudžuk comes from the cattle fed with fodder from natural pastures and meadows. The geographical area is at a high altitude, with rich pastures and a tradition in meat preservation techniques from the local population, which all make this a well-known product, even outside Montenegrin borders.

# Production process

In the Balkans, product is made exclusively from beef meat from aged animals whose meat has a high dry matter content and a slightly dark colour. Meat is cut into small pieces along with the fat tissue, with the addition of garlic and salt, and is filled into the intestines. The sausages are smoked in the beech wood and dried for 10 days.

#### **Dairy Products**

#### 1. CHEESE PRLJO



@ Ivan Ivanovic, Northern Montenegro, 2016

Name of product

**PRLIO** 

**Product type** 

Cheese

Area of production

Northern Montenegro

Number of producers (est.)

200 farmers

Volumes (est.)

500 tonnes

Value of production (est.)

EUR 0.5 million

Social and historical facts Nomadic herders, mostly Vlachs, brought the technology of white cheese in the northern regions of Montenegro, as well as lowland regions where they used to have dairy cattle spending the winter. Processing of milk and cheese is very widespread in the mountains as in other mountainous areas of the Balkan Peninsula.

Description of the product

In Montenegro and other mountainous regions, many types of low-fat "hard" or cooked cheeses like Prljo are produced (including Torotan, Crushed, Čukan cheese, etc.). Cheese names do not fit in the classic cheese classification. In cheese production, cheeses made from skim milk are well-known; these are obtained after removing the fat content in the production of butter, cream or creaming.

These cheeses are always a by-product of the main production. After removing cream, boiled skim milk remains, from which the appropriate processing of cheese products begins. According to the method of processing and ripening there are two sub-types, namely: cheese in the wooden pot and cheese in the sack. Ripening in both cases in under anaerobic conditions. By its quality, it belongs to a group of lean cheeses, of a hard crumble structure, specific taste and aroma. The taste of this cheese particularly that of the skins, is specific and has a culinary match of local consumers. Cheese is mostly consumed in households, and only partially sold on the market.

### Human and natural factors

Piva as a mountainous area full of large pastures is suitable for cattle growing. These pastures, however, are covered with snow from mid-October to early November, which sometimes remains until June. Farmers spend the summer collecting hay for a long and snowy winter. Hay cutting begins in early-June and ends in September, but this period varies from village to village, depending on the altitude and the period when the snow melts and varies up to a month.

# Production process

Cheese Prljo is produced from cow and sheep milk, as well as a mixtures of both. The manual milking of cows is done twice a day while sheep milking only in the morning. After milking, the milk is drained. Then, the milk is cooked and left for two to three days to stand on shelves. This period can sometimes be just a day if the weather is very hot. During this time the cream is separated at the milk surface. When the cream is removed, milk is added to homemade rennet obtained from lamb, veal or beef stomach. When the curd begins to sediment on the bottom of the boiler, frequent mixing is necessary to avoid curd burnt, which is subsequently transferred to the cheese flavour. The cheese is then pressed for 24 hours and placed/stiffly compressed in the lamb or hip skin. Cheese matures inside the skin for one year in order to obtain its characteristic taste and organoleptic properties.

#### 2. KOLASINSKI CHEESE Cheese from Kolasin (Leafy Cheese)



@ Ivan Ivanovic, Kolasin, 2016

Name of product

KOLASINSKI SIR (Lisnati sir)

**Product type** 

Processed dairy product

Area of production

Northern Montenegro, Kolasin

Number of producers (est.)

600 farmers

Volumes (est.)

1200 tonnes

Value of production (est.)

EUR 6 million

Social and historical facts

Nomadic herders, mostly Vlachs, brought the technology of white cheese in the northern regions of Montenegro, as well as lowland regions where they used to have dairy cattle spending the winter. Processing of milk and cheese is widespread in the mountains of Dinara, as in other mountainous areas of the Balkan Peninsula. The Kolasin area is the mountain area with many pastures suitable for cattle breeding. The cow's milk is processed into the famous soft cheese characteristic for this locality and it is not produced elsewhere in Montenegro.

## Description of the product

The cheese consists of fine layers of 2-3 mm thick; that are rolled before consumption. Texture and taste are similar to mozzarella, lightly salted and slightly acid. The aroma is of fresh milk.

### **Human and natural** factors

Many factors affect the production of this cheese, which can be made in such a way that it is possible to separate almost transparent layers. That is why it is called the card (thin paper used for bending tobacco). It is obvious that in any other locality in Montenegro, even if a recipe is applied consistently, it is impossible to obtain the same result. Probably, it is due to climate, but also to the type of meadow and mountain grass which the cows are fed with. Another very important aspect is the traditionally asset skills and knowledge of the local people.

#### **Production process**

The milk is heated (70°C) and is left 12 hours. Then, the cream is taken. To this fat-free milk new full fat milk is added in a ratio of 1:1. After that the milk is cooked at 50°C in summer and 70°C in winter. Rennet is added and then after about ½ hour, the curd is formed and the whey is expelled. Afterwards, the curd is pressed and folded every 15 minutes, roughly 20 to 30 times to allow for the separation of the whey. That yields 1 kg of cheese. The cheese is then sold in layers or in big rolls. Traditionally, the big layers are consumed in big pieces containing several layers. More sophisticated presentations are used nowadays in restaurants. Fine layers are separated before serving are rolled. For layered cheese, half of the milk from which the cream is removed (so-called grijavine), and half of "whole" milk is used. Grijavina is left to stand for 24 hours, and then the milk from which the cream is not removed is added. When the curd is formed, the cheese is twisted in nylon and then allowed to stand for two to three hours. Scrolling is accomplished by frequent "overlapping" the cheese, so that thin films or sheets are created, which is interesting. Unlike fat cheese, which is left in the vat, the whey is drained from layered cheese and is not wrapped in the gauze. That's why it is called card (thin paper used for bending tobacco).

# **3. SKORUP** Old kajmak



@ Ivan Ivanovic, Kolasin, 2016

Name of product SKORUP

**Product type** 

Processed dairy product

Area of production

Northern Montenegro

Number of producers (est.)

200 farmers

Volumes (est.)

15 tonnes

Value of production (est.)

EUR 18000

## Social and historical facts

In the mountain region, breeding of domestic animals (cattle and sheep) was the main activity of the population. Apart from meat products, domestic animals are also reared for milk, which is used for processing into different dairy products. One of the most important is "skorup" (Cvijic, 1922, Trojanovic, 1896), which is collected and salted milk cream. Its origins date back to the nomadic period, since this is a product that can be kept for a longer time, and the local people used to carrying it with them while moving through pastures with the herds.

The product is characterized by high fat content, having joint specific features of cheese and butter. It has pleasant dairy aroma, with butter scent coming from the

### Description of the product

formed di-acetyl. The specific taste is due to the activity of the indigenous strains of lactic acid bacteria, coming from the pastures where the animals are fed almost throughout the entire year.

### Human and natural factors

n/a

#### **Production process**

Cow, sheep or mixed milk is heated up to the boiling temperature. It is poured into the pans and left to be gradually cooled. The cream is formed within the period of 1 to 2 days. The rind is then removed, dry salted and put in layers for ripening which lasts up to three months.

#### 4. PLJEVLJA CHEESE



@ Slavko Mirecki, Pljevlja, 2016

Name of product

PLJEVALJSKI SIR

**Product type** 

Dairy product

Area of production

Northern Montenegro, Pljevlja

Number of producers (est.)

4000 farmers, but only 2000 sell cheese on the market. 1 commercial dairy

Volumes (est.)

600 tonnes

Value of production (est.)

EUR 1.7 million

Social and historical facts According to documents found archived in Dubrovnik, the trade from Breznica to Dubrovnik was developed for honey, fur, wax, and other livestock products. At the beginning of the fifteenth century, the trade routes were well developed and these passed through Breznica to the coastal towns and Dubrovnik. In the second half of the fifteenth and early sixteenth century, Pljevlja belonged to nahija Kukanj and was its' centre. Its population was divided into two social groups: Vlachs – animal breeders and land cultivators. Shepherd defters from 1598 show that in Pljevlja tens of thousands of sheep and goats were bred. Immediately after the World War II, 80 percent of the population of Pljevlja was involved in agriculture. In particular, animal husbandry was developed and agriculture accounted for a significant segment of the economy of the municipality. From the fifties, authorities' priority in the development of the industry takes over. In order to strengthen the development of agriculture, there were 40 purchase-sale of farmer cooperatives. The cooperatives included some 1 518 households with approximately 7 800 members and assets of households. The extent that animal husbandry was developed is demonstrated by the number of

livestock in the municipality: in 1968, 98 000 sheep, 26 567 cattle, 2 528 pigs, 4 417 horses and 26 819 livestock were registered. In 1969, the cooperative purchased a total of 38 827 lambs, 14 375 sheep, and 2 446 cattle. When we compare these data with data from the next period, it can be observed a significant decline in the livestock number. Thus, according to 1986 statistics in Pljevlja municipality, there were 25 386 cattle, 66 899 sheep, 2,020 horses, and 217 pigs. This decline has been continuing. According to the census of 1991, there were 19 464 cattle, 65 402 sheep, 1 249 horses, 349 pigs and 27 119 chickens.

## Description of the product

Pljevlja cheese is a full-fat cheese containing more than 50 percent fat in dry matter. The average water content of 53.08 percent indicates that it is a soft cheese, although any cheese that could be classified in semi-hard cheeses.

### Human and natural factors

Pljevlja region is a mountainous area rich in natural pastures suitable for cattle growing. The pasture season can last up to eight months. Farmers mostly use hay for feeding animals during the winter months. The specific floristic composition of the pastures highly influences the quality of milk used for the Pljevaljski cheese production. The local population has been involved in cattle breeding for centuries, and their skills and knowledge are used for milk preservation, resulting in the production of Pljevaljski cheese of a characteristic quality. In addition, temperature variations in the Pljevalja area are not featured with the high amplitudes, thus allowing the extended shelf life of this soft cheese.

#### **Production process**

After an average of 6 hours of pressing, the resulting cheese shape is cut into slices, the slices are stacked in buckets or tubs and salted during stacking. Slicing process is very important, because it is desirable that the slices have a shape that will best fit the form of cans or tubs. Cutting takes about 15 minutes. Stacking the slices and salting is done at the same time and takes 5-15 minutes. Ripening is performed in brine or water prepared from the whey and is, depending on the household 7-45 days, usually 2-4 weeks. When the vat is filled, the cheese is loaded with wooden circle so that all quantities of the cheese are beneath the surface of the brine. Occasionally the surface of the brine is cleaned.

#### 5. NJEGUSKI CHEESE



@ Slavko Mirecki, Njegusi, 2016

Name of product

NJEGUŠKI SIR

**Product type** 

Processed milk

Area of production

Central Montenegro, Njeguši, Cetinje

Number of producers (est.)

600 farmers

Volumes (est.)

500 tonnes

Value of production (est.)

EUR 4 million

Social and historical facts

In the massif of Dinar Mountains, the predominant economic operation was the production and trade of hard cheeses dating back to the Roman period (Petrovic, 1988). Njegusi cheese is one of these cheeses whose traditional production technology remains to present times (Bulatovic, 1938; Doset et al, 1987; Rakocevic, 1950). Cheese is salted with sea salt, and sometimes for its preservation it is kept in olive oil. In the XVII century, the cheese was included into the German anthology of the world cheeses.

Description of the product

Njeguški cheese is a semi-hard cheese with a thin and smooth crust of golden-yellow colour, closed and hard consistency yet easy to cut with a few "cheese eyes", pleasant odour, slightly milky-sour and moderately salty taste.

### Human and natural factors

Natural factors: Mountain pastures, collision of the Mediterranean and mountain climate. Human factors: Tradition in the production technology, and indigenous sheep breeds.

The original Njeguši cheese is produced from ewe's milk. Milking is done manually. Milk is filtered through a "cjedilo", cheese making cloth, and boiled to the temperature of 32° to 35°C. After reaching the optimal temperature, homemade rennet, made from parts of lamb stomach, is added. The amount of rennet should be sufficient to form sturdy curd in 30-60 minutes. After the curd is formed, it is cut up to the size of walnuts, and after 5 minutes of resting, to the size of corn grains. Cheese curd is formed in the whey gradually heated to the temperature "until the hand can withstand" (40-45°C). All the time the curd has to be formed by hands in whey until it gets a globose shape. This phase lasts 15-20 minutes, and the goal is to achieve optimal separation of whey and form a favourable curd structure. Formed curd is placed in "cjedilo" and, by hand squeezing, an additional amount of whey is separated. After that, the curd is placed in "tvorilo", wooden or metal cheese mould, and pressed. Curd is pressed, first, with wooden circular plank and then with stone added on a plank. After 12 hours of pressing, the curd is placed in a new, dry cloth, rolled over to the other side and again pressed for next 12 hours. After total 24 hours of pressing, the cheese is removed from the mould and salted with a dry salt. The salted cheese is placed in "kašun", a wooden chest. The first 2 days, the cheese is salted 2-3 times per day and each time turned on the dry side. Salting is done in "kašun" because cheese is protected from flies and rodents. Also, "kašun" provides a stable temperature, which is essential for the uniform salting. After salting, the cheese is ripened. According to the narratives of experienced manufacturer, the best quality cheese is obtained if the ripening takes place in "volat" (room with stone vault placed on the basement). The average temperature during ripening was 16, 1°C and with 87.6% humidity. Cheese ripens on dry wooden shelves. In the first 3-4 days of ripening, the cheese is turned 2-3 times per day and always put on the dry part of the shelf. Later, the cheeses are turned once a day. Ripening on the shelves takes at least 4 weeks. During that period, it is necessary to maintain the surface of cheese. Mostly, moulds are the main problem and they can be effectively removed by washing the surface of cheese with cold and salty water. After washing, it is

#### **Production process**

necessary to dry cheese with clean, dry cloth and then put it back on the shelf. Ripening on the shelves commonly lasts for 40-50 days. After that, cheese is ready for consumption or ripening could be prolonged. Longer ripening gives cheese more piquant taste. Also, ripened cheese may be exposed to smoke for a few days, dipped into the olive oil or put into wheat grain. Cheese can stay in oil or grain from 90 to 150 days.

#### Cereals

#### 1. HLEDA BRAŠNO

**Buckwheat flour** 

Name of product HI

HLEDA BRAŠNO

**Product type** 

Cereal

Area of

North Montenegro municipalities of Bijelo Polje, Pljevlja and partly Savnik.

production

Produced also in Prije Polje, Nova Varos, Sjneica and Tutin, as well as in BiH

Number of producers (est.)

100-130

Volumes (est.)

80-100 tonnes on 100 ha (in Montenegro)

Value of

production (est.)

Wholesale price: 2.5 Euro / kg. Retail price: 3 Euro / kg flour

Value of Montenegro's total production: 300 000 Euros

Social and historical facts

Until the mid of the 20th century, buckwheat has been – along with other cereals and potato – one of the staple foods of the mountainous region in the Balkans and particularly in Sandžak. Rural households consumed it in different forms such as bread, Kačamak, sweets, pita or pancake. The buckwheat hulls were previously used for manufacturing of pillows. Today a marginal production takes place in Nova Varoš (Serbia). Different cereal producers' associations promote the production of organic buckwheat flour. Three of them are in Plevlja. There are subsidies of 150-180 euro/ha for cereals if commercial seeds are utilized.

Buckwheat production in the region is a very old tradition.

**Description of the product** 

The buckwheat flour of the region is known for its good properties for bread preparation and is recognisable by its specific white and silver colour, its sweet taste and its rough texture. In all these aspects, it differs drastically from Slovenian and Serbian varieties that have higher yields.

### Human and natural factors

The specific properties are two-fold. The first is the use of Golubara, an old autochthonous variety of Sandžak region (incl. Serbian Sandžak) and B&H. The name comes from golub meaning (white) pigeon due to the colour of the flour. The other reason is the milling techniques.

## Production process

Buckwheat cropping is characterised by low-input production, with the presence of many certified organic producers, using their own produced seeds. The grinding process is achieved exclusively with water-powered millstones.

### **Traditional Speciality Guarantees**

#### 1. KAČAMAK



@ Jasmin Ajanovic, Pljevlja, 2016

Name of product

KAČAMAK

**Product type** 

Dish

Area of production

North and Central Montenegro

History and origin

In the past, Montenegrins were mainly engaged in agriculture activities that demanded high-energy consumption. Therefore, that energy had to be renewed through caloric food intake. Kačamak was a dish that contributed to the caloric demands and therefore was consumed on a regular basis by rural farming families from the northern areas of the country, where livestock production was predominant, It was consumed along with quality potato yields and corn as a predominantly grown crop species.

Consumption and usage

Kačamak continues to be regularly consumed in households, for breakfast, dinner and served in all of the restaurants as a traditional dish.

# Ingredients and preparation

Potatoes, flour (usually corn) and water. Potatoes and flour are cooked in water before to be mashed with a wooden spoon in order to obtain a mass. After, kajmak and/or cheese can be added to obtain fatty kačamak.

#### 2. RASTAN

Name of product

RAŠTAN

**Product type** 

Dish

Area of production

Central Montenegro

History and origin

Mediterranean plant brought to Montenegro by Romans. Mostly produced in the Cetinje region. It is rich in potassium, calcium, B vitamins and vitamin C. Given its health properties and excellent taste, it is widely used in Montenegro in combination with dried meat as a traditional meal for lunch, especially during the winter.

Consumption and usage

Lunch and dinner, during the summer season.

Ingredients and preparation

The mode of preparation gives the product its specific aroma and taste. The taste originates from the interaction between Brassica olearcea (rastan) with the meat. Production process and ingredients: chopped rastan is washed several times in different waters to lose its natural acerb flavour, and then it is put into water for boiling along with the dry meat and the mixture is cooked for a longer time. After cooking the chard, it is added to give an even better taste to this dish. Some people cook the rastan without chard but it has a better taste with the rastan. Depending on the needs of the consumers, it can also be prepared with dry pork knee. The loss of the specific quality could be due to the utilization of different ingredients of a poor quality or short cooking time.

#### 3. CICVARA



@ Jasmin Ajanovic, Pljevlja, 2016

Name of product

CICVARA

**Product type** 

Dish

Area of production

North and Central Montenegro

History and origin

In the past, Montenegrins were mainly dealing with agriculture activities that demanded high-energy consumption. Therefore, that energy had to be renewed through higher food intake. A highly popular dish among Montenegrins was kacamak, traditionally made out of cornflower, potato and kajmak and/or cheese. It is the habit especially of the people from northern areas of the country, where livestock production was predominant, along with quality potato yields and corn as a predominantly crop species grown.

Consumption and usage

Breakfast and dinner.

## Ingredients and preparation

Kajmak is poured and stirred until completely converted to fat. Then, the flour is gradually added and mixed without allowing being stacked to the bottom of the pot. The mass is mixed until the flour is completely united with the fat. Cicvara should be mixed circularly until it ceases to stick to the spoon and to the pan. When Cicvara starts to become a compacted mass, then the dish is ready to serve.

#### 4. PRIGANICE



@ Jasmin Ajanovic, Pljevlja, 2016

Name of product

**PRIGANICE** 

Dish

**Product type** 

Area of production

Central and south Montenegro

History and origin

Traditionally made, as a simple, cheap, but yet tasty meal that can be combined with cheese, honey or sugar.

Consumption and usage

Consumed throughout the year, for breakfast, dinner, for holidays and for welcoming guests in the house. Consumption is often associated with the holiday season, especially on Good Friday and Christmas Day.

Ingredients and preparation

Soft, pastry. Raisins or ground nuts can be added. Consumed with honey or sprinkled with sugar, rich, full of pleasant taste.

#### 5. LAMB IN MILK

Name of product JAGNJE U MLEKO

Product type Dish

**Area of** North Montenegro

production

**History and origin** The North of Montenegro is characterized with extensive sheep breeding where

the animals graze on the mountain pastures for more than 10 months. Feeding the animals solely with pasture grasses provides the specific quality and taste

of the meat.

 $Consumption\ and$ 

usage

Lunch and dinner.

Ingredients and preparation

Lamb is cooked in salted water, and afterwards in milk.

#### 6. LAMB UNDER SAC

Name of product JAGNJETINA ISPOD SAČA

Product type Dish

**Area of** North Montenegro

production

**History and origin** The North of Montenegro is characterized by extensive sheep breeding where

the animals graze on mountain pastures for more than 10 months. Feeding

solely with pasture grasses provides the specific meat quality and taste.

Consumption and

usage

Lunch or dinner, during the spring and summer months.

Ingredients and preparation

The lamb meat is traditionally cooked covered with heated wood, in the specially designed metal dishes called "sach" mixed with potato. The lamb meat is seasoned with spices prior to cooking.

#### 7. TARANA



@ Jasmin Ajanovic, Pljevlja, 2016

Name of product

TARANA

**Product type** 

Dish

Area of production

Ulcinj

History and origin

Traditionally, people living in the area were producing olive oil, using it for the preparation of different meals.

Consumption and usage

Breakfast, dinner.

Ingredients and preparation

This dish is a mixture of wheat flour, salt, yeast and yogurt, which is dried in a thin layer for two to three days in the sun and draft, and then crumbled into lumps. Preparation includes frying in olive oil until it becomes a reddish colour and achieves a certain density (similar to polenta). It is part of the daily diet, usually consumed with meat, or mixed with older bread dipped in olive oil. Its taste and smell are not strong, with excellent thick consistency and smooth texture. The wheat flour and yogurt affect the texture and the olive oil provides a means for frying well without oxidation, retaining its nutritional properties.

#### 8. GURABIJA



@ Jasmin Ajanovic, Pljevlja, 2016

Name of product

GURABIJA

**Product type** 

Dish

Area of

North Montenegro

production

North Montenegro

History and origin

The area for many centuries was under the influence of the Ottoman Empire, and the way of preparing many dishes has been adapted to the local tradition. This is especially true for sweets and deserts containing nuts and sugar.

Consumption and usage

Dessert.

Ingredients and preparation

Sweets with nuts. Mixture of 3 eggs and 3 dl cups of sugar. Add flour, a glass of buttermilk and baking soda or baking powder. The mixture is baked in the oven.

#### 9. HACALIJA



@ Jasmin Ajanovic, Pljevlja, 2016

Name of product

HACALIJA

**Product type** 

Dish

Area of

production

Plav; North Montenegro

History and origin

Traditionally prepared in North Montenegro, Hacalija was introduced in Montenegro during the Ottoman occupation and is especially popular among the Muslim population.

Consumption and usage

Dessert.

Ingredients and preparation

Add baking soda and flour until it becomes thick. It is baked for 2 hours. When the cake has cooled down, the sorbet is poured over (250g sugar and 1 litre of water to boil). Someone may opt to add walnuts, powdered coconut, etc. based on taste.

#### 10. DRIED CARP



@ Jasmin Ajanovic, Pljevlja, 2016

Name of product

**SARAN** 

**Product type** 

Dish

Area of

Crmnica, Skadar Lake

production

History and origin

People living in the area found this to be a good way to preserve fish they caught in the lake. Since there were many willow trees around, they used them for smoking, giving the product a characteristic taste. Locals were also trading the product on the other markets for other types of goods.

Consumption and usage

Used for lunch and dinner with bread and vegetables.

Ingredients and preparation

After the carp is caught, it is cleaned and all of the internal organs are removed. Then, the cleft carp is placed for 3 days in salt. Afterwards, it is washed and put to drain, attached with a couple wood sticks (bracket) to stand like that gutted so it could be fine dried. After that, it is smoked for 3 days. It is produced out of the fish weighing more than 2kg cleaned, cut up and spread in one piece of dry beech or willow wood not less than 24 hours.

#### 11. DRIED BLEAK



@ Maja-Pg, Coolinarika, 2010

Name of product

SUVA UKLJEVA

**Product type** 

Dish

Area of

production

Crmnica, Skadar Lake

History and origin

People living in the area found this to be a good way to preserve fish they caught in the lake. Since there were many willow trees around, they used them for smoking, which gives the product a characteristic taste. Locals were also trading the product on the other markets for other types of goods.

Consumption and usage

Lunch, dinner.

Ingredients and preparation

When caught, the bleak is removed from the net. Then, it is put in a bowl and salted. For each 19-20kg of fish, approximately 1kg of salt is added and allowed to stand for about 17-18 hours. It is stirred to be equally salted, and to have as much as possible of the skin removed. It is then washed in the water and inserted into the wire. It is dried for 48 hours. The fire must not be strong, just enough so that it is dried by the smoke. It is dried on willow wood in order to obtain a brighter colour (gold).

#### **12. EEL WITH RICE**

Name of product

JEGULJA SA RIZOM

**Product type** 

Dish

Area of

Crmnica, Skadar Lake

History and origin

production

People living in the area found this to be a good way to preserve fish they caught in the lake. Since there were many willow trees around, they used them for smoking, which gives the product a characteristic taste. Locals were also trading the product on the other markets for other types of goods.

Consumption and usage

Lunch, dinner.

Ingredients and preparation

Eel is cleaned and cut in small pieces. In a frying pan, the pieces are fried with the onions, a small carrot, parsley and 3 cups of rice and the water. Then, the spices (salt, seasoning, red pepper, and pepper) are added; it is heated until it starts crunching. In the baking tray, the eel pieces are put and poured into a mixture which has been previously prepared. And everything is baked until it becomes golden brown.

Annex: Methodology

**Tools used for the inventory** 

The collection and analysis of data are based on the FAO methodology and the related questionnaires (see Quality Origin Webtool (QOW) <a href="http://www.fao.org/food-quality-origin/webtool/en/">http://www.fao.org/food-quality-origin/webtool/en/</a>). A specific questionnaire for the Montenegro inventory has been elaborated integrating from QOW most of the product identity form, the whole questionnaire 1 of the QOM, and few questions of questionnaire 2 measuring the size of the value chain. Additional questions

related to TSG have been included.

Previous to the data collection necessary to fill this questionnaire, a "Product fiche" will be

completed thanks to the data collected at local level.

The data will be then entered in a database and a report will be prepared to disseminate inventory  $\,$ 

results.

The results of the inventory will be discussed trough a steering committee composed of experts invited by MARD. This committee will be able to i) provide more information on some products; ii) confirm the GOI/STG potential iii) to define whether a food can be considered/promoted as part of the Montenegrin cuisine. The steering committee will also discuss in the second phase for

the selection of the pilot.

Steps and roles of the different stakeholders

The inventory per se include 3 steps:

1. The definition of the objectives and the frame of the inventory

2. The systematic identification of traditional products with specific quality

3. The identification of products with a potential for GI or TSG registration

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#### Steps and role of each stakeholders [Step 1] [Step 2] [Step 4] [Step 5] [Step 3] Definition of Definition of Systematic Identification of quality action plan objectives, Inventory for of potentials terms of local linked to for pilot for reference and products development products geographical strategic origin orientation Working group **UDG** students, local expert in MARD and local REDD, **FAO/MNE MARD** FAO, Local **FAO/MNE MARD** authorities and Expert, and **MARD** FAO experts, key informants Project (FAO and **MARD** Value-chain actors REDD) Producers' FAO, REDD, In consultation organisations the with Local Expert,

Adapted for *Identification of origin-linked products and their potential for development; a methodology for participatory inventories.* FAO, 2012

These 3 steps appear in red in the above chart.

Additional steps related to the selection of products with potential for development and of the pilot case will be undertaken in a second phase.

The whole process is conducted in the frame of the FAO-EBRD project with an important decision-making role of the Ministry of Agriculture and Rural Development (MARD) that wanted this inventory and who will pilot the main decision through the working group the MARD will chair.

The operational arm of the inventory is the University of Donja Gorica (UDG) and in particular 14 students who will cover 7 different areas of Montenegro (7 team of 2 students for collecting data). The local expert, Professor at the UDG of the project will directly supervise their work.

FAO with the support of REDD will assist local stakeholders during the whole process in term of method and making available existing documentation.

stakeholders

#### **Sources of information**

In order to document each of the products, the students involved in the inventory exercise will collect both primary and secondary information through 5 types of source:

- 1. Documentation resulting from the desk research or supplied by the project;
- 2. Information collected by the MARD at municipality / local level (a letter is sent to all municipalities to ask for information);
- 3. Identification of GI products by students on retail markets (specialised shops and green markets in Podgorica and in or at the proximity the area of production);
- 4. Key informants interviews made by students (3 to 4 interviews per product see below);
- 5. The food fair of Budva taking place from the 12<sup>th</sup> to the 13<sup>th</sup> March.

(1), (2) and (3) will provide enough information necessary to establish the wide list of potential GI and TSGs. Key informants at local level, and sometimes in Podgorica will then allow students to fill the questionnaire.

#### Document and web-based references

FOCUS – Balkans report on methodology (see attachment)

Coolinarika at http://www.coolinarika.com/recept/montenegro-hacapuri/?meta\_refresh=1

Bibliography at <a href="http://www.focus-balkans.org/?p=98">http://www.focus-balkans.org/?p=98</a>

Wikipedia at <a href="http://en.wikipedia.org/wiki/Montenegrin cuisine">http://en.wikipedia.org/wiki/Montenegrin cuisine</a>

Comparison of meat and quality characteristics between Norwegian white sheep and western Balkan pramenka sheep at <a href="mailto:file://Users/pascalbernardoni/Downloads/Article%20Izmir12042013[1].pdf">file://Users/pascalbernardoni/Downloads/Article%20Izmir12042013[1].pdf</a>

#### **Markets**

- In Podgorica:
  - o Green markets
  - Specialised market (cheese shop, butcher, delicatessen)
- Local markets:
  - o Green market in municipality
- Restaurants menus (TSG)

#### **Key informants**

- Value chain stakeholders (farmers, processors, traders, wholesale and retail sector)
- Staff in charge on agriculture in **municipalities**
- Animal and Plant extension services
- Facilitators, NGOs active in agriculture, culture, tourism
- Restaurant chefs (TSG, Montenegrin cuisine)

#### Data collection techniques, traps and tricks

#### **Vested interests**

By definition, the stakeholders who will be interviewed have **stakes** and vested interests. Producers and processors might present facts from their point of view. The area of production they'll describe might exclude other producers who are producing the same product; the process to obtain the product will very likely be based on his/her production process, etc.

The local politicians and municipality staff, with the legitimate will to promote their municipality, might exaggerate production volume or the specific quality of the product.

This problem can be true for many of the key-informant.

So there are some ways to make sure the information / data collected best reflect the reality:

- Interview several producers of different types (large, medium, farm based)
- Interview people as neutral as possible from the value chain perspective

Note: the place of production for the link to origin in the inventory is an approximate, it refers to a global administrative or landscape area, and not corresponds to the precise delimitation area that will be necessary to define later on in a case of GI.

#### Quantitative data

Some quantitative data must be collected. As in the Montenegrin sector data are not always available or often inaccurate, the objective is to have some estimations that inform us on the volumes of production and volumes sold (and self-consumption).

One way to do it is to use the following matrix:

|                           | Number of unit | Average quantity / unit | Total quantity  |
|---------------------------|----------------|-------------------------|-----------------|
| Home based producers      | a              | w                       | a*w             |
| Small producers           | b              | X                       | b*x             |
| Semi industrial companies | С              | у                       | c*y             |
| Industrial companies      | d              | Z                       | d*z             |
| Total                     | a+b+c+d        |                         | a*w+b*x+c*y+d*z |

In that way we do not have just the total quantities but also some indications on the importance of each of the producer's types.